Operator: AMEREN ILLINOIS COMPANY	Operator ID#: 32513
Inspection Date(s): 11/18/2014, 11/19/2014	Man Days: 2
Inspection Unit: Shanghai Storage	
Location of Audit: Alexis	
Exit Meeting Contact: Robert Roth	
Inspection Type: Standard Inspection - Record Audit	
Pipeline Safety Representative(s): Charles Gribbins	
Company Representative to Receive Report: Michael Fuller	
Company Representative's Email Address: mfuller2@ameren.com	

Headquarters Address Information:	300 Liberty	
	Peoria, IL 61602	
	Emergency Phone#: (800) 755-5000	
	Fax#:	
Official or Mayor's Name:	Ron Pate	
	Phone#: (217) 424-6518	
	Email:	
Inspection Contact(s)	Title	Phone No.
Robert Roth	Senior Quality Assurance Consultant	

Gas System Operations	Status
Gas Transporter	ANR, NGPL, PEPL
Miles of Main	Total Miles 8967
Confirm Operator's Potential Impact Radius Calculations	See Comment
General Comment:	<u> </u>
4.5 -98.19 6.625-144.56 8.625-188.20 10.75-234.56	
Annual Report (Form 7100.2.1) reviewed for the year:	Not Checked
General Comment:	1

The Annual Report was reviewed at the Pawnee Train	ning Center on February 18-20-2014	
Regul	atory Reporting Records	Status
[191.5]	Were Telephonic Notices of Incidents reported to the NRC (800-424-8802)?	Not Applicable
General Comment:		
No incidents occurred in the storage field that required	l reporting per Part 191 requirements.	
[191.15(a)]	Was a DOT Incident Report Form F7100.2 submitted within 30 days after detection of an incident?	Not Applicable
General Comment:		
No incidents reports were required to be submitted in 2	2012 or 2013.	
[191.15(b)]	Were there any supplemental incident reports when deemed necessary?	Not Applicable
General Comment:		
No supplemental incident reports were required to be	submitted in 2012 or 2013	
[191.23(a)]	Did the operator report Safety Related Conditions?	Not Applicable
General Comment:	•	
No safety related condition reports were required in 20	012 or 2013	
[191.25]	Did the Operator file a Safety Related Condition Report within 5 working days of determination, but not later than 10 working days after discovery?	Not Applicable
General Comment:		
No safety related condition reports were required in 20	012 or 2013	
[192.16(c)]	Customer Notification: Has the operator notified each customer after the customer first receives gas at a particular location?	Not Applicable
General Comment:		
Customer notification is not applicable as no customer	rs are supplied by the storage field.	
	DRUG TESTING	Status
Refer to Drug and Alcohol Inspection Forms and Protocols		Not Checked
General Comment:		
did confirm the Ameren Drug and Alcohol Program info	as part of this inspection. The plan was reviewed by the ICC earlier in 2012 during a ormation / Policy was posted at the Johnston City Storage Field Office as was the Enfor determining if an employee is showing signs of unauthorized use of drugs or alcoh	nployee Assistance
TE	ST REQUIREMENTS	Status

[192.517(a)][192.505,192.507,192.509,192	.511(c)] Are pressure test records being maintained for piping operating above 100 psig?	Satisfactory
General Comment:		
Staff reviewed pressure charts to confirm the pressure	e testing was being conducted as required, for 2012 and 2013 records.	
[192.517(b)][192.511,192.509,192.513]	Are pressure test records being maintained for at least 5 years on piping operating below 100 psig?	Not Applicable
General Comment:	•	
There was no piping installed in the storage field in 20	012. In 2013 there were pressure tests conducted in the Shanghai Storage Field in pla	nt pipe.
	UPRATING	Status
Category Comment:		
No uprating was performed in the Shanghai Storage F	Field in 2012 or 2013.	
[192.555][192.555]	Has the operator maintained documentation of uprating activities when uprating a pipe to a pressure that will produce a hoop stress of 30% or more SMYS?	Not Applicable
[192.557][192.557]	Has the operator maintained documentation of uprating activities when uprating a pipe to a pressure that will produce a hoop stress of less than 30% SMYS?	Not Applicable
	OPERATIONS	Status
[192.603(b)][192.605(a)]	Has the operator conducted a review of the Operations and Maintenance Manual once per yr/15 months?	Satisfactory
General Comment:		
In April 2013 a review was conducted of significant ch	anges to the O&M Plan for Illinois	
Has the operator conducted a review of the	Operator Qualification Plan once per yr/15 months?	Not Checked
General Comment:		
The OQ Plan was reviewed at the Pawnee Training C	enter on February 19, 2013.	
[192.603(b)][192.605(b)(3)]	Are construction records, maps, and operating history available to operating personnel?	Satisfactory
[192.603(b)][192.605(b)(8)]	Has the operator periodically reviewed personnel's work to determine the effectiveness of normal O&M procedures when deficiencies are found?	Satisfactory
General Comment:	•	
No deficiencies were identified in the storage field pro	cedure in 2013. Storage field personnel are included in the Ameren Quality Assessme	ent Program.
[192.603(b)][192.605(c)(1)(i)]	Does the operator maintain documentation for responding to, investigating, and correcting the cause of unintended closure of valves or shutdowns?	Satisfactory
General Comment:		

The operator did not have any unintended closure	of valve or shutdowns.	
[192.603(b)][192.605(c)(1)(ii)]	Does the operator maintain documentation for responding to, investigating, and correcting the cause of increase or decrease in pressure or flow rate outside normal operating limits?	Satisfactory
General Comment:		
The operator responded to several instances when	e the pressure had dropped and set off the low pressure alarm and shut down the compre	essor.
[192.603(b)][192.605(c)(1)(iii)]	Does the operator maintain documentation for responding to, investigating, and correcting the cause of loss of communications?	Satisfactory
General Comment:	<u> </u>	
The records do not indicate that the operator had a	any loss of communications during the 2012 and 2013 year.	
[192.603(b)][192.605(c)(1)(iv)]	Does the operator maintain documentation for responding to, investigating, and correcting the cause of operation of any safety device?	Satisfactory
General Comment:		
Alarms that were received were responded to in a	timely manner and corrective actions were taken for the 2012 and 2013.	
[192.603(b)][192.605(c)(1)(v)]	Does the operator maintain documentation for responding to, investigating, and correcting the cause of any other foreseeable malfunction of a component, deviation from normal operation, or personnel error which may result in a hazard to persons or property?	Satisfactory
General Comment:		
A majority of the abnormal operation alarms were t	to low pressure alarms.	
[192.603(b)][192.605(c)(2)]	Does the operator maintain documentation of checking variations from normal operation after abnormal operation has ended at sufficient critical locations in the system to determine continued integrity and safe operation?	Satisfactory
General Comment:	·	
No issues were identified after making corrective a	ctions.	
[192.603(b)][192.605(c)(3)]	Does the operator maintain documentation of notifying responsible operator personnel when notice of an abnormal operation is received?	Satisfactory
General Comment:	·	
Ameren maintains documentation of notification red	ceived and the correction actions taken.	
[192.603(b)][192.605(c)(4)]	Does the operator maintain documentation for periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal	Satisfactory

Unless otherwise noted, all code references are to 49CFR Part 192. If an item is marked Unsatisfactory, Not Applicable, or Not Checked, an explanation must be included in this report.

	operation and taking corrective action where deficiencies are found?	
General Comment:		
Staff reviewed the actions taken during periods of abnormal o	perations and no deficiencies were identified in 2012 and 2013.	
[192.603(b)][192.619,192.621,192.623]	Is the operator maintaining documentation verifying their Maximum Allowable Operating Pressure(s)? (MAOP)	Satisfactory
General Comment:		
Decatur Engineering maintains the documentation regarding t Engineering established the pressure at which new piping sha documentation that the Shanghai Storage had on file.	the system MAOP. Maps are utilized to record the current MAOP of piping in t all be tested for new installations and to ensure the current MAOP is maintaine	he Storage Fields. ed. Staff did review
CONTINUING SU	JRVEILLANCE RECORDS	Status
[192.709(c)][192.613(a)]	Has the operator reviewed continuing surveillance records for class location changes, failures, leak history, corrosion, changes in cathodic protection, and other unusual operating and maintenance conditions?	Satisfactory
General Comment:		
Class location surveys are performed by the Transmission Int Staff reviewed the pipeline patrol records provided by the ope	egrity Group. These records were reviewed during the Transmission Integrity rator at Shanghai Storage.	Department audit.
CLASS LC	DCATION CHANGE	Status
[192.709(c)][192.609]	Does the operator maintain documentation when the class location changes for a segment of pipe operating at a hoop stress that is more than 40% SMYS?	Satisfactory
General Comment:		
No class location changes occurred in 2012 or 2013 at Shang	hai Storage.	
QUALIFICATION	OF PIPELINE PERSONNEL	Status
Refer to operator Qualification Inspection Forms a	and Protocols	Not Checked
General Comment:		
Operator Qualification Plan was not reviewed during this Audi	t. The OQ Plan was reviewed at the Pawnee Training Center on February 19,	2014
DAMAGE PR	EVENTION RECORDS	Status
Category Comment:		
Locates for the Shanghai Storage Field are performed by con- reviewed during a separate audit. There were no damages on	tract locators. These records are maintained by the Belleville Damage Preven the storage field piping to third party damage.	tion Group and are
[192.709(c)][191.17(a)]	Did the operator track the number of damages per 1000 locate requests for the previous years?	Not Checked
Has the number of damages increased or decrease	sed from prior year?	Not Checked
[192.709(c)][192.617]	Does the operator track records of accidents due to excavation damage to ensure causes of failures are	Not Checked

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[192.709(c)][192.614(c)(3)]	Does the operator provide documentation pertaining to notification of excavation, marking, positive response, and	Not Checked
	the availability and use of the one call system?	Not Gricoked
Does the operator have a Quality Assurance facilities?	e Program in place for monitoring the locating and marking of	Not Checked
Do pipeline operators include performance	measures in facility locating contracts?	Not Checked
[IL ADM. CO.265.100(b)(1)]	Was third party damage to mains involving a release of gas reported to ICC JULIE Enforcement? http://www.icc.illinois.gov/julie/	Not Checked
Has the Operator adopted applicable section	on of the Common Ground Alliance Best Practices?	Not Checked
If no, were Common Ground Alliance Best	Practices discussed with Operator?	Not Checked
E	MERGENCY PLANS	Status
[192.603(b)][192.615(b)(1)]	Are supervisors, responsible for emergency action, furnished copies of the latest edition of the Emergency Plan?	Satisfactory
General Comment:	·	
Supervisors are supplied with a current copy of the Er	nergency Plan and it is available on line.	
[192.603(b)][192.615(b)(2)]	Has the operator maintained documentation that the appropriate operating personnel have received training to assure they are knowledgeable of emergency procedures and that the training was effective?	Satisfactory
General Comment:		
Staff reviewed documentation of the operators training	g. (Ameren Operator Qualification Employee Summary Sheet) for 2012 and 2013.	
[192.603(b)][192.615(b)(3)]	Has the operator maintained documentation of employee activity reviews to determine whether the procedures were effectively followed in each emergency?	Satisfactory
General Comment:		
No reviews of employee's activities were required due	to no emergencies have occurred in 2012 or 2013.	
[192.603(b)][192.615(c)]	Has the operator maintained documentation that the operator established and maintained liaison with appropriate fire, police and other public officials?	Satisfactory
General Comment:		
	ss Program Administrator located at the Pawnee Training Center. These records are r eck during this audit. The PA Plan was reviewed on February 20, 2014.	reviewed during the
[192.603(b)][192.615(a)(3)]	Did the review of emergency response time intervals regarding odor/leak complaint documentation indicate adequate emergency response intervals were achieved?	Satisfactory
General Comment:	· · · · · · · · · · · · · · · · · · ·	

[192.603(b)][192.615(a)(11)]	Has the operator maintained documentation of actions that were required to be taken by a controller during and emergency?	Satisfactory
General Comment:		
This information is maintained in the Shanghai A	bnormal Operation Log for 2012 and 2013.	
PUBLIC A	WARENESS PROGRAM - RECORDS	Status
Refer to Public Awareness Program In:	spection Forms and Protocols	Not Checked
General Comment:		
The Public Awareness plan was reviewed at the	Pawnee Training Center, on February 20, 2014	
	ODORIZATION OF GAS	Status
[192.709(c)][192.625(f)]	Where required, has the operator maintained documentation of odorant concentration level testing?	Not Applicable
General Comment:		
Odorometer tests are performed using an odorm	neter and the records are maintained and reviewed during the local service area record aud	its.
[192.709(c)][192.625(e)]	Where required, has the operator maintained documentation of odorizer tank levels?	Satisfactory
General Comment:		
Odorizer tank levels were maintained as required	d. This information is maintained on Monthly Odorization Report. 2012 and 2013 reports we	ere reviewed.
PATF	ROLLING & LEAKAGE SURVEY	Status
[192.709(c)][192.705]	Does the operator maintain documentation of a patrol program as required?	Satisfactory
General Comment:		
The Shanghai Storage Field patrolling was done	as required for 2012 and 2013.	
	Does the operator maintain documentation of leakage	Satisfactory
[192.709(c)][192.706]	survey(s) performed on a transmission pipeline?	
. , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	survey(s) performed on a transmission pipeline?	
General Comment: Staff reviewed paper documents and leak surve	y maps of the transmission system from 2012 and 2013. The leak surveys were conducted	annually using a
General Comment: Staff reviewed paper documents and leak survey Flame Ionization Unit.		annually using a Status
Flame Ionization Unit.	r maps of the transmission system from 2012 and 2013. The leak surveys were conducted	

[192.603(b)][192.727(b)]	Did the operator maintain documentation demonstrating that each pipeline abandoned in place was disconnected from all sources and supplies of gas, and purged of gas?	Not Applicable
General Comment:		•
The operator did not purge any piping in 2012 or 201	3.	
[192.603(b)][192.727(c)]	Did the operator maintain documentation demonstrating that each inactive pipeline that is not being maintained under this part was disconnected from all sources and supplies of gas; purged of gas?	Not Applicable
General Comment:	<u> </u>	
The operator did not purge any pipelines in 2012 or 2	2013.	
[192.603(b)][192.727(e)]	Did the operator maintain documentation when air was used for purging that a combustible mixture was not present after purging?	Not Applicable
General Comment:		
The operator did not purge any pipelines in 2013		
[192.727(g)][192.727(g)]	Did the operator maintain documentation for each abandoned onshore pipeline facility that crosses over, under or through a commercially navigable waterway?	Not Applicable
General Comment:		•
There is no navigable waterways in the area.		
CC	OMPRESSOR STATION	Status
[192.709(c)][192.731(a)]	Has the operator maintained documentation of the compressor station relief devices at a minimum of 1 per year/15 months?	Satisfactory
General Comment:	<u> </u>	•
Discharge Relief Valve was inspected on 5/10/12 and	d 5/10/12	
[192.709(c)][192.731(c)]	Has the operator maintained documentation compressor station emergency shutdown at a minimum of 1 per year/15 months?	Satisfactory
General Comment:		•
The Emergency Shutdown ESD System was conduc	eted on 3/27/12 and 3/21/2013	
[192.709(c)][192.736(c)]	Has the operator maintained documentation of the compressor stations – detection and alarms?	Satisfactory
General Comment:		
This information is logged on the following form Store and August of 2013	age Field Compressor Critical Alarms and Test for Automatic Shutdown Systems, Apr	il and May 2012, May

PRESSURE LIMI	TING AND REGULATION	Status
[192.709(c)][192.739(a)]	Is the operator inspecting and testing the pressure limiting and regulating stations at a minimum of 1 per year/15 months?	Satisfactory
General Comment:		
Relief were inspected as required. There are no regulators utilized	zed for pressure regulation at Shanghai Storage. The flow controller utilized	at Shanghai storage.
[192.709(c)][192.743(a)]	Is the operator inspecting pressure limiting and regulating stations for adequate capacity at a minimum of 1 per year/15 months?	Not Applicable
General Comment:		
Only reliefs were required to be inspected in 2012 and 2013. 7	There are no pressure regulators in the station utilized to control pressure wit	hin the station.
[192.709(c)][192.743(b)]	If the operator used calculations to determine sufficient capacity, were the calculation reviews documented at a minimum of 1 per year/15 months?	Satisfactory
General Comment:		
Ameren has capacity calculations for the reliefs in the system.		
[192.709(c)][192.743(a),192.743(b),192.195(b)(2)]	Is overpressure protection provided by the supplier pipeline downstream of the take point?	Satisfactory
General Comment:		
This requirement is not applicable to the Shanghai Storage field supplier.	d as gas being stored is received through the Ameren Transmission System	and not directly from a
[192.709(c)][192.743(a)]	If Yes, does the operator have documentation to verify that these devices have adequate capacity?	Satisfactory
VALVE	MAINTENANCE	Status
[192.709(c)][192.745(a),192.745(b)]	Did the operator inspect and partially operate transmission valves that might be required during any emergency at a minimum of 1 per year/15 months?	Satisfactory
General Comment:		
Valves associated with the storage field were inspected as requ	uired.	
[192.709(c)][192.749]	Did the operator inspect and maintain vaults > 200 cubic feet at a minimum of 1 per year/15 months?	Not Applicable
General Comment:		
There are no vaults in the transmission system that meets the 2	200 Cubic foot requirements.	
[192.709(c)][192.179]	Are transmission line valves being installed as required of 192.179?	Not Applicable
General Comment:		
There have not been any new valves installed in the Transmiss	ion System in 2012 and 2013.	

[192.709(b)][192.745(b)]	Did the operator take prompt remedial action to correct any valve found inoperable, unless an alternative valve was designated?	Not Applicable
General Comment:		
There were not any valves found inoperable in the	Shanghai Storage Field.	
l	nvestigation Of Failures	Status
[192.709(c)][192.617]	Did the operator experience accidents or failures requiring analysis?	Satisfactory
General Comment:		
No failures occurred in Shanghai Storage field that	required analysis.	
W	ELDING OF STEEL PIPE	Status
[192.603(b)][192.225(b)]	Does the operator have documentation for their qualified welding procedure?	Satisfactory
General Comment:		
Staff reviewed the operators qualified welding prod	redures.	
[192.603(b)][192.227,192.229]	Does the operator have documentation of welder qualification documentation as required?	Satisfactory
[192.807]	Does the operator have documentation of welder OQ records?	Satisfactory
General Comment:		
Staff reviewed the following forms for OQ Ameren	Operator Qualification Employee Summary Sheet.	
[192.709][192.243(b)(2)]	Does the operator have documentation of NDT personnel qualification as required?	Not Applicable
General Comment:		
The operator did not have any projects in 2012 or 2	2013 that required NDT to be performed	
[192.709][192.243(f)]	Does the operator have documentation of NDT testing performed?	Not Applicable
General Comment:		
The operator did not have any projects in 2012 or 2	2013 that required NDT to be performed	
CORR	OSION CONTROL RECORDS	Status
[192.491(a)][192.491(a)]	Has the operator maintained maps or records of cathodically protected piping, cathodic protection facilities, galvanic anodes, and neighboring structures bonded to the cathodic protection system	Satisfactory
[192.491][192.459]	Has the operator maintained documentation of	Satisfactory

	examination when buried pipe was exposed?	
General Comment:		
Staff reviewed Buried Pipe Examination reports that were c	ompleted when the pipeline was exposed.	
[192.491][192.465(a)]	Has the operator maintained documentation of annual pipe-to-soil monitoring performed at a minimum of 1 per yr/15 months and/or isolated services or short sections of main less than 100 feet at a minimum of 10% annually?	Satisfactory
General Comment:	•	
	e to soil readings, after the review staff determined that the reading were being piewed the test points for Shanghai Storage. No issues were observed.	performed at a
[192.491][192.465(b)]	Has the operator maintained documentation of rectifier or other impressed current power sources inspections at a minimum of 6 per year/ 2 1/2 months?	Satisfactory
General Comment:	•	
Paper and computers records were reviewed and inspection	ns were found to have been completed as required.	
[192.491][192.465(c)]	Has the operator maintained documentation of each critical interference bond, reverse current switch, diode, etc. inspections at a minimum of 6 per year/ 2 1/2 months and/or non-critical interference bond inspections at a minimum of 1 per year/15 months?	Satisfactory
General Comment:		
There are 13 non-critical bonds in the Shanghai Storage all months.	were found to have meet the minimum inspection requirements of once each ye	ear not exceeding 15
[192.491][192.465(d)]	Has the operator taken prompt remedial actions to correct any deficiencies indicated by the monitoring?	Satisfactory
General Comment:		
There was no corrective actions required in 2012 or 2013 d	ue to no down/low readings.	
[192.491][192.465(e)]	Has the operator maintained documentation of unprotected pipeline surveys, inspections, or tests at a minimum of 3 years/39 months?	Not Applicable
General Comment:		
There is no unprotected pipelines in the transmission system	m.	
[192.491][192.467(a),192.467(c),192.467(d)]	Has the operator maintained documentation of inspections or tests for electrical isolation including casings?	Not Applicable
General Comment:	<u> </u>	
There are no casings in the storage field.		
[192.491][192.469]	Does the operator have a sufficient number of test stations or other contact points for electrical measurement to	Satisfactory

	determine the adequacy of cathodic protection?	
[192.491][192.471]	Has the operator maintained documentation of corrective actions taken when a test lead is no longer electrically conductive?	Not Applicable
General Comment:		
The operator has not experienced any test le	ead failures in 2012 or 2013.	
[192.491][192.473(b)]	Has the operator maintained documentation of inspections or tests to assure their cathodic protection system is not affecting adjacent underground metallic structures?	Satisfactory
General Comment:		
There are no other underground metallic str	uctures in the area of the Transmission System.	
[192.491][192.475(a)]	Has the operator maintained documentation of investigations or steps taken to minimize internal corrosion due to transportation of corrosive gas?	Not Applicable
General Comment:	<u> </u>	
Staff reviewed the following form "Corrosion	Coupon Weight Loss Monitor Sites Status Report"	
[192.491][192.475(b)]	Has the operator maintained documentation of internal surface inspections performed when pipe is removed for any reason?	Satisfactory
General Comment:	<u> </u>	
Internal pipe inspections will be performed w	then piping is removed or abandoned. No pipe was removed in 2012 or 2013.	
[192.491]	Has the operator maintained documentation of written procedures supported by as-built drawings or other construction records?	Satisfactory
General Comment:	·	
Staff reviewed as built drawings and work po	ockets.	
[192.491][192.477]	Has the operator maintained documentation of internal corrosion coupon monitoring at a minimum of 2 per year/ 7 1/2 months?	Satisfactory
General Comment:	<u> </u>	
Staff reviewed the following form "Corrosion	Coupon Weight Loss Monitor Sites Status Report"	
[192.491][192.479]	Has the operator maintained documentation of corrective action where atmospheric corrosion was discovered?	Satisfactory
General Comment:		
No issues were identified during the 2012 ar inspection of above ground inspections.	nd 2013 atmospheric corrosion survey. This information is retained with the leak survey informa	tion and with the
[192.491][192.481]	Has the operator maintained documentation of	Satisfactory

	atmospheric corrosion control monitoring at a minimum of 1 per 3 years/ 39 months?	
General Comment:	i per o years/ oo montris:	
The operator conducts atmospheric corrosion inspected eve	ery year during the leakage survey for 2012 and 2013 inspection year.	
[192.491][192.483(a),192.483(b),192.483(c)]	Has the operator maintained documentation demonstrating that pipe removed due to external corrosion has been repaired or replaced with pipe that was coated and cathodically protected?	Satisfactory
General Comment:		
No transmission gas piping has been removed due to exten	nal corrosion in 2012 and 2013.	
TRAINING	- 83 IL ADM. CODE 520	Status
[520.10(a) (1)]	Has the operator maintained documentation demonstrating that personnel have received adequate training?	Satisfactory
General Comment:		
These records are kept on the Company computer site called	ed "Insight"	
[520.10(a) (2)]	Do training records include verbal instruction and/or on the job training for each job classification?	Satisfactory
[520.10(b)]	Has the municipal operator maintained documentation demonstrating that personnel have received adequate training?	Not Applicable
General Comment:		
This is a requirement for municipal operators only and is no	t applicable to this operator.	
[520.10(a)(5)]	Are procedures periodically updated to include new materials, new methods of operation and installation, and changes in general procedures?	Satisfactory
General Comment:	•	
No new procedures were incorporated in 2012 or 2013 for t	he Shanghai Storage Facility.	